

CLAIM AMENDMENTS

1. (Currently Amended) A protection device for a stator of a turbine comprising a series of annular sectors (12) which can be coupled by means of connection means a connector, each sector (12) comprising a first side surface (13) which has at least one cavity (14) equipped with a bottom (15), characterized in that wherein each bottom (15) of said at least one cavity (14) is convex and in that each sector (12) comprises at least one stiffening rib (16) positioned inside said at least one cavity (14) and having a variable section in a longitudinal direction to modulate the rigidity of each sector (12).
2. (Currently Amended) The protection device (10) according to claim 1, characterized in that wherein said bottom (15) is convex in a circumferential and/or axial direction.
3. (Currently Amended) The protection device (10) according to claim 1 or 2, characterized in that wherein said convex bottom (15) has an apex which in an axial section has an axial curvature radius  $70$  which, divided by the radius of the rotor, has a value preferably ranging from 0.221 to 0.299.
4. (Currently Amended) The protection device (10) according to claim 3, wherein characterized in that said axial curvature radius  $(70)$ , divided by the radius of the rotor, has a value equal to 0.260.
5. (Currently Amended) The protection device (10) according to claim 3 or 4, wherein characterized in that said apex in a radial section has a circumferential curvature radius  $(60)$  which, divided by the radius of the rotor, has a value preferably ranging from 0.365 to 0.494.

6. (Currently Amended) The protection device (10)—according to claim 5, wherein characterized in that said circumferential curvature radius (60), divided by the radius of the rotor, has a value equal to 0.429.
7. (Currently Amended) The protection device (10)—according to any of the claims from claim 3 to 6, wherein characterized in that said apex in an axial section has a distance (80) from one end of said at least one cavity (14), said distance (80) divided by an axial length of said at least one cavity (14) has a value ranging from 0.142 to 0.192.
8. (Currently Amended) The protection device (10)—according to claim 7, wherein characterized in that said distance (80) divided by an axial length of said at least one cavity (14) has a value equal to 0.167.
9. (Currently Amended) The protection device (10)—according to any of the claims from claim 1 to 8, wherein characterized in that with respect to the axis of the turbine (70), said rib (16) along an axial direction is tilted by an angle (50) which ranges from 3.162° to 4.278°.
10. (Currently Amended) The protection device (10)—according to claim 9, wherein characterized in that said angle (50) is 3.72°.
11. (Currently Amended) The protection device (10)—according to any of the claims from claim 1 to 10, characterized in that wherein said rib (16) has a maximum axial height (90) which, divided by the axial length of said at least one cavity (14) has a value ranging from 0.133 to 0.180.

12. (Currently Amended) The protection device (40)—according to claim 11, wherein characterized in that said maximum axial height (90), divided by the axial length of said at least one cavity (14) has a value equal to 0.156.
13. (Currently Amended) The protection device (40)—according to any of the claims from claim 1 to 12, wherein characterized in that each sector (12) comprises a sheet (20) equipped with a series of pass-through holes (21) which is fixed to said at least one cavity (14).
14. (Currently Amended) The protection device (40)—according to claim 13, wherein characterized in that said sheet (20) is integral with the corresponding sector (12) of said series of sectors (12).